=> s 120014-06-4

L1

1 120014-06-4 (120014-06-4/RN)

=> d

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN

RN 120014-06-4 REGISTRY

ED Entered STN: 07 Apr 1989

CN 1H-Inden-1-one, 2,3-dihydro-5,6-dimethoxy-2-[[1-(phenylmethyl)-4-piperidinyl]methyl]- (CA INDEX NAME)

OTHER NAMES:

CN (\pm) -E 2020

CN 1-Benzyl-4-[(5,6-dimethoxy-1-oxoindan-2-yl)methyl]piperidine

CN Donepezil

DR 142057-79-2

MF C24 H29 N O3

CI COM

SR CA

LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CIN, CSCHEM, CSNB, DDFU, DRUGU, EMBASE, IMSDRUGNEWS, IMSPATENTS, IMSRESEARCH, IPA, MRCK*, MSDS-OHS, PATDPASPC, PHAR, PROMT, PROUSDDR, PS, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL

(*File contains numerically searchable property data) Other Sources: WHO

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

801 REFERENCES IN FILE CA (1907 TO DATE)

18 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

809 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> fil caplus COST IN U.S. DOLLARS

SINCE FILE ENTRY TOTAL SESSION

FULL ESTIMATED COST

2.40 2.61

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http://www.cas.org/infopolicy.html

=> s 11

L2 809 L1

=> s 12 and (noncrystal? or residue? or amorph? or (spray?(3w)(dry or dried))) 3250 NONCRYSTAL?

683339 RESIDUE?

279150 AMORPH?

271237 SPRAY?

472863 · DRY

414750 DRIED

12909 SPRAY? (3W) (DRY OR DRIED)

L3 11 L2 AND (NONCRYSTAL? OR RESIDUE? OR AMORPH? OR (SPRAY?(3W)(DRY OR DRIED)))

=> d bib abs hit 11

L3 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN.

AN 1989:173102 CAPLUS

DN 110:173102

TI Preparation of 1-benzyl-4-(substituted alkyl)piperidines and analogs as acetylcholinesterase inhibitors

IN Sugimoto, Hachiro; Tsuchiya, Yutaka; Higurashi, Kunizou; Karibe, Norio; Iimura, Yuoichi; Sasaki, Atsushi; Yamanashi, Yoshiharu; Ogura, Hiroo; Araki, Shin; et al.

PA Eisai Co., Ltd., Japan

SO Eur. Pat. Appl., 103 pp. CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

PAIN.	PATENT NO.	ĸ	CIND DAT	E AP	PLICATION NO.		DATE
PI	EP 296560		A2 1988	31228 EP	1988-109924		9880622
	EP 296560		A3 1990	00502			
	EP 296560		B1 1996	50228			
		BE, CH, D	E, ES, FR	GB, GR, I	T, LI, LU, NL	, SE	
	FI 8802716		A . 1988		1988-2716		.9880608
	FI 95572		B 1995	51115		_	
	FI 95572		C 1996	50226			
	NO 8802696		A 1988	31223 NO	1988-2696	. 1	.9880617
	NO 177590		B 1995	50710			
	NO 177590		C 1995	51018			
	ZA 8804338		A 1989	90329 ZA	1988-4338	1	.9880617
	US 4895841		A 1990		1988-209339		9880620
	DK 8803379 ·		A 1988	31223 DK	1988-3379		9880621
•	DK 172337		B1 1998	30330			
	HU 50768		A2 1990	00328 HU	1988-3160	. 1	9880621
	HU 214592		B 1998	30428		, ~	
	DD 283377		A5 1990	01010 DD	1988-316988	1	9880621
	RU 2009128		C1 1994		1988-4356030		9880621
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		1338808			С				19880621
		8818216			Α				19880622
		627151			B2	19920820		•	
		1030752			A	19890201			19880622
		1024547 01079151			В				
		2578475			A B2				19880622
		579263			A1	19970205 19940119			10000500
		579263			B1				19880622
			BE.	CH.			GR, IT, LI, LU, NL,	C F	
	EP	673927	,	,	A1	19950927	EP 1995-104080	36	19880622
•	EP	673927			В1	20010919			19000022
		R: AT,	BE,	CH,	DE,	ES, FR, GB,	GR, IT, LI, LU, NL,	SE	
		134618			${f T}$	19960315	AT 1988-109924		19880622
		2083359			Т3	19960416	ES 1988-109924		19880622
		742207			A1	19961113	ES 1988-109924 EP 1996-110252		19880622
	EP	742207			B1	20010829			
	3.00	R: AT,	BE,	CH,	DE,	ES, FR, GB,	GR, IT, LI, LU, NL,	SE	
		171161			T		AT 1993-113146		19880622
		2121039 1116716			T3	19981116	ES 1993-113146		19880622
•	EE		DF	СП	A1	20010118	EP 2001-102878 GR, IT, LI, LU, NL,		19880622
	ΑТ	204862	DE,	Cn,	T	20010015	AT 1996-110252	SE	
		205828			T	20010915			19880622
		2160747			Т3	20011015			19880622 19880622
		2164720			Т3	20020301	ES 1995-104080		19880622
	US	5100901			Α	19920331			19891018
	CN	1073939			Α				19921110
		1034015			В	19970212			
		1071417			Α	19930428	CN 1992-112995		19921112
		1038839			В	19980624			
		07252216			A	19951003	JP 1994-291169		19941125
		2733203			B2	19980330			
		1340192 9502850			C A				19950424
٠.		102534			В	19950609 19981231	FI 1995-2850		19950609
		102534			В В1	19981231			
		9602753			A	19960704	FI 1996-2753		
		103969	•		В	19991029	11 1990 2799		19960704
		103969			B1	19991029			
		9601082			Α	19961003	DK 1996-1082		19961003
		175246			. B1	20040719			
		9601083			Α	19961003	DK 1996-1083		19961003
		175717			B1	20050131			
		10067739			A	19980310	JP 1997-186306		19970711
		3078244 3036553			B2	20000821			
DDAT		1987-1550	50		Т3	20011231	GR 2001-401406		20010906
LIVAL		1988-2716			A A	19870622			
		1988-2093			A3	19880608 19880620			
		1988-5699			A3	19880621			
		1988-1037			A	19880622			
		1988-1099			A3	19880622	·		
		1995-1040			A3	19880622			
	JP	1994-2911	69		АЗ	19880622			
os	MAR	PAT 110:1	7310	2			•		
GI								•	

AB The title compds. [I; B = (CHR2)r, CO(CHR2)r, NR4(CHR2)r, etc.; J = alkyl, cyclic amide residue, R1CH:CH, (un)substituted Ph, cyclohexyl, heterocyclyl, mono- or divalent (un)substituted indanyl, PhCOCHMe, etc.; K = H, acyl, (un)substituted Ph, aralkyl, etc.; Q = N, C (sic), NO; R1 = H, alkoxycarbonyl; R2 = H, Me; R4 = H, alkyl, acyl, (un)substituted Ph; PhCH2, etc.; T = N, C; q = 1-3; r = 0-10; JB and BT may be doubly bonded] were prepared Ph3PCH2OMeCl was stirred 30 min at 0° with BuLi in Et2O after which 1-benzyl-4-piperidone was added and the mixture stirred at room temperature 3 h to give an oil which was refluxed 3 h in aqueous MeOH containing

HCl to give 1-benzylpiperidine-4-carboxaldehyde (II). 5,6-Dimethoxy-1-indanone was stirred with (Me2CH)2NLi in THF containing HMPA after which II was added and the mixture stirred 2 h to give indanonylidenemethylpiperidine III (R5R6 = bond) which was hydrogenated over Pd/C to give, after acidification, III.HCl (R5 = R6 = H). The latter gave 55% inhibition of scopolamine-induced learning impairment in rats at

0.125 mg/kg orally.

AB The title compds. [I; B = (CHR2)r, CO(CHR2)r, NR4(CHR2)r, etc.; J = alkyl, cyclic amide residue, R1CH:CH, (un)substituted Ph, cyclohexyl, heterocyclyl, mono- or divalent (un)substituted indanyl, PhCOCHMe, etc.; K = H, acyl, (un)substituted Ph, aralkyl, etc.; Q = N, C (sic), NO; R1 = H, alkoxycarbonyl; R2 = H, Me; R4 = H, alkyl, acyl, (un)substituted Ph; PhCH2, etc.; T = N, C; q = 1-3; r = 0-10; JB and BT may be doubly bonded] were prepared Ph3PCH2OMeCl was stirred 30 min at 0° with BuLi in Et2O after which 1-benzyl-4-piperidone was added and the mixture stirred at room temperature 3 h to give an oil which was refluxed 3 h in aqueous MeOH containing

HCl to give 1-benzylpiperidine-4-carboxaldehyde (II). 5,6-Dimethoxy-1-indanone was stirred with (Me2CH)2NLi in THF containing HMPA after which II was added and the mixture stirred 2 h to give indanonylidenemethylpiperidine III (R5R6 = bond) which was hydrogenated over Pd/C to give, after acidification, III.HCl (R5 = R6 = H). The latter gave 55% inhibition of scopolamine-induced learning impairment in rats at 0.125 mg/kg orally.

IT 120014-06-4P 120014-07-5P 120014-08-6P 120014-09-7P 120014-10-0P 120014-11-1P 120014-12-2P 120014-13-3P 120014-14-4P 120014-15-5P 120014-16-6P 120028-72-0P 120028-73-1P 120028-74-2P 120028-75-3P 120028-76-4P 120028-77-5P 120028-78-6P 120028-79-7P 121202-92-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as acetylcholinesterase inhibitor)

=> d bib hit 10

- L3 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
- AN 2000:861473 CAPLUS
- DN 134:32972
- TI Porous drug matrixes containing polymers and sugars and methods of their manufacture
- IN Straub, Julie; Bernstein, Howard; Chickering, Donald E., III; Khatak, Sarwat; Randall, Greg
- PA Acusphere, Inc., USA
- SO PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DT Patent LA English FAN.CNT 2

	WO 2000072827					KIND DATE				API	PLI	DATE								
PI					A2 20001207 A3 20010125				WO		20000525									
		W:	CZ,	DE,	DK,	DM,	EE,	AZ, ES, KP,	FI,	GB,	GI	D,	GE,	GH.	GM.	HR.	HU.	TD.	TT.	
	•		MD,	MG,	MK,	MN,	MW,	MX, TT,	NO,	NZ,	PI	Ŀ,	PT.	RO.	RU.	SD.	SE.	SG,	MA, SI,	
		RW:	GH, DE,	GM, DK,	KE, ES,	LS, FI,	MW, FR,	MZ, GB,	SD, GR,	SL, IE,	SZ IT	Ζ, Γ,	TZ, LU,	UG, MC,	ZW, NL,	AT, PT,	BE.	CH, BF,	CY, BJ,	
	CA	CF, CG, CI, US 6395300 CA 2371836				В1	CM, GA, GN, G B1 200205 A1 200012			ML, MR, NE, SN, TD, TG US 1999-433486 CA 2000-2371836							19991104 2000525			
	ΕP	CA 2371836 EP 1180020 EP 1180020				C A2 B1	C 20060131 A2 20020220													
		R:	AT, IE,	SI,	CH, LT,	DE, LV,	DK, FI,	ES, RO,	FR, CY							NL,	SE,	MC,	PT,	
	JP	BR 2000010984 JP 2003500438 NZ 516083				A T A	20030829										20000525 20000525 20000525			
•	ΑT	76802 31260 16425	01			B2 T A1		20031 20051 20060	1215		AU AT	20 20	00-3	54459 93930 27194	9 65	· .	20 20	00005	525 525	
		R:	AT, IE,	BE, FI,	CH,	DE,	DK,	ES,	FR,	GB,	GF	₹,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
	CN	2250: 1823: 2002:	737	96		- T3 A A1		20060 20060 20020	0830		ES CN US	20 20 20	00-9 05-1 01-7	93936 10136 79882	5940		. 20	00005 00005 00103	525	
	NO	66103 20010 20011	00575			B2 A		20030	0128	•	NO	20	01-5	5753			20	0111	.26	
	ZA HK	20010 10489	01034 956	17		A A A1		20030 20030 20060)730)728		ZA	20	01-1	PA121 10347 10131			20	0111 0112 0302	218	
PRAI	US	1999- 1999- 1999-	-1586	559P		P P A		19990 19991 19991	1008											
	US CN	2000- 2000- 2000-	-1863 -8081	310P 161		P A3		20000 20000 20000)302)525											
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AB Drugs, especially low aqueous solubility drugs, are provided in a porous matrix form,

preferably microparticles, which enhances dissoln. of the drug in aqueous media. The drug matrixes preferably are made using a process that includes (i) dissolving a drug, preferably a drug having low aqueous solubility, in

a volatile solvent to form a drug solution, (ii) combining at least one pore forming agent with the drug solution to form an emulsion, suspension, or second solns., and (iii) removing the volatile solvent and pore forming agent from the emulsion, suspension, or second solution to yield the porous matrix of drug. The pore forming agent can be either a volatile liquid that is immiscible with the drug solvent or a volatile solid compound, preferably a volatile salt. In a preferred embodiment, spray drying is used to remove the solvents and the pore forming agent. The resulting porous matrix has a faster rate of dissoln. following administration to a patient, as compared to non-porous matrix forms of the drug. In a

preferred embodiment, microparticles of the porous drug matrix are reconstituted with an aqueous medium and administered parenterally, or processed using standard techniques into tablets or capsules for oral administration. Paclitaxel or docetaxel can be provided in a porous matrix form, which allows the drug to be formulated without solubilizing agents and administered as a bolus. For example, a nifedipine-loaded organic solution was prepared by dissolving 9.09 g of PEG 3350, 2.27 g of nifedipine, and 0.009 g of lecithin in 182 mL of methylene chloride. An aqueous solution

prepared by dissolving 3.27 g of NH4HCO3 and 0.91 g of PEG 3350 in 1.82 mL of water. The aqueous and organic solns. were homogenized and resulting emulsion

was spray dried. A suspension of the porous
 nifedipine drug matrix was prepared in 5% dextrose solution at a concentration
of 2.5

mg/mL. A bolus injection of the suspension was tolerated when administrated to dogs.

was

IT 50-28-2, Estradiol, biological studies 50-35-1, Thalidomide Dextrose, biological studies 52-53-9, Verapamil 53-03-2, Prednisone 55-98-1, Busulfan 57-63-6, Ethinyl estradiol 58-61-7, Adenosine, biological studies 59-92-7, Levodopa, biological studies 67-97-0, Vitamin D3 67-97-0D, Vitamin D3, analogs 71-58-9, Medroxyprogesterone acetate 75-64-9, Erbumine, biological studies 77-36-1, Chlorthalidone 89-57-6, Mesalamine 126-07-8, Griseofulvin 128-13-2, Ursodiol 298-46-4, Carbamazepine 302-79-4, Tretinoin 321-64-2, Tacrine 363-24-6, Dinoprostone 437-38-7, Fentanyl 439-14-5, Diazepam 443-48-1, Metronidazole 518-28-5, Podofilox 745-65-3, Alprostadil 846-49-1, Lorazepam 1951-25-3, Amiodarone 3239-44-9, Dexfenfluramine 4759-48-2, Isotretinoin 5534-09-8, Beclomethasone dipropionate 5593-20-4, Betamethasone dipropionate 9002-68-0, Follitropin 9002-72-6, Growth hormone 9007-12-9, Calcitonin 9041-93-4, Bleomycin sulfate 10238-21-8, Glyburide 11096-26-7, Erythropoietin 12629-01-5, Somatropin 12633-72-6, Amphotericin 13311-84-7, Flutamide 15307-79-6, Diclofenac sodium 15307-86-5. Diclofenac 15687-27-1, Ibuprofen 18559-94-9, Albuterol 20830-75-5, Digoxin 21256-18-8, Oxaprozin 21829-25-4, Nifedipine 22204-53-1, Naproxen 27203-92-5, Tramadol 28860-95-9, Carbidopa 28981-97-7. 29094-61-9, Glipizide 30516-87-1, Zidovudine Alprazolam 32986-56-4, 33069-62-4, Paclitaxel Tobramycin 34911-55-2, Bupropion 36505-84-7, 40391-99-9 41340-25-4, Etodolac 41575-94-4, Carboplatin Buspirone 42399-41-7, Diltiazem 42924-53-8, Nabumetone 51022-70-9, Albuterol 51333-22-3, Budesonide sulfate 51773-92-3, Mefloquine hydrochloride 54143-55-4, Flecainide 54527-84-3, Nicardipine hydrochloride 54910-89-3, Fluoxetine 54965-21-8, Albendazole 54965-24-1, Tamoxifen citrate 55268-75-2, Cefuroxime 56124-62-0, Valrubicin 56180-94-0, 59729-33-8, Citalopram Acarbose 60142-96-3, Gabapentin 60205-81-4, 63659-18-7, Betaxolol Ipratropium 65277-42-1, Ketoconazole 66085-59-4, Nimodipine 66376-36-1, Alendronate 66852-54-8, Halobetasol 69655-05-6, Didanosine propionate 70476-82-3, Mitoxantrone 72432-03-2, Miglitol hydrochloride 72509-76-3, Felodipine 72558-82-8, Ceftazidime 72956-09-3, Carvedilol 73384-59-5, Ceftriaxone 73590-58-6, Omeprazole 75330-75-5, Lovastatin 75695-93-1, Isradipine 75847-73-3, Enalapril 76095-16-4, Enalapril maleate 76547-98-3, Lisinopril 76824-35-6, Famotidine 76963-41-2, Nizatidine 77883-43-3. Doxazosin mesylate 78246-49-8, Paroxetine hydrochloride 78628-80-5, Terbinafine hydrochloride 78755-81-4, Flumazenil 79517-01-4. Octreotide acetate 79559-97-0, Sertraline hydrochloride 79794-75-5, Loratadine 79902-63-9, Simvastatin 80274-67-5, Metoprolol fumarate 81098-60-4, Cisapride 81103-11-9, Clarithromycin 82410-32-0, Ganciclovir 82752-99-6, Nefazodone hydrochloride 82834-16-0, Perindopril 83799-24-0, Fexofenadine 83905-01-5, Azithromycin 83919-23-7, Mometasone furoate 84625-61-6, Itraconazole 85721-33-1,

Ciprofloxacin 86386-73-4, Fluconazole 86541-74-4, Benazepril hydrochloride 86541-75-5, Benazepril 87679-37-6, Trandolapril 89778-27-8, Toremifene citrate 91161-71-6, Terbinafine Rubitecan 93413-69-5, Venlafaxine 93957-54-1, Fluvastatin 95058-81-4, Gemcitabine 95233-18-4, Atovaguone 97048-13-0, Urofollitropin 97322-87-7, Troglitazone 98048-97-6, Fosinopril 98079-52-8, Lomefloxacin hydrochloride 98319-26-7, Finasteride 99011-02-6, Imiquimod 99294-93-6, Zolpidem tartrate 100286-90-6, Irinotecan hydrochloride 100986-85-4, Levofloxacin 103577-45-3, 103628-48-4, Sumatriptan succinate Lansoprazole 103775-10-6, Moexipril 104227-87-4, Famciclovir 104632-25-9, Pramipexole dihydrochloride 106266-06-2, Risperidone 106463-17-6, Tamsulosin hydrochloride 106685-40-9, Adapalene 107753-78-6, Zafirlukast 109889-09-0, Granisetron 110871-86-8, Sparfloxacin 111470-99-6, Amlodipine besylate 111974-72-2, Quetiapine fumarate 112809-51-5, Letrozole 113806-05-6, Olopatadine 114798-26-4, Losartan 114977-28-5, Docetaxel: 115956-12-2, Dolasetron 120014-06-4, Donepezil 124832-26-4, Valacyclovir 127779-20-8, Saquinavir 131918-61-1, Paricalcitol 132539-06-1, Olanzapine 134308-13-7, Tolcapone 134678-17-4, Lamivudine 137862-53-4, Valsartan 140678-14-4, Mangafodipir trisodium 142373-60-2, Tirofiban hydrochloride 143011-72-7, Granulocyte colony-stimulating factor 144701-48-4, Telmisartan 145040-37-5, Candesartan cilexetil 147059-72-1, Trovafloxacin 147245-92-9, Glatiramer acetate 150378-17-9, Indinavir 154248-97-2, Imiglucerase 154598-52-4, Efavirenz 155141-29-0, Rosiglitazone maleate 155213-67-5, 158966-92-8, Montelukast 159989-65-8, Nelfinavir mesylate Ritonavir 161814-49-9, Amprenavir 162011-90-7, Rofecoxib 169590-42-5, Celecoxib 171599-83-0, Sildenafil citrate 679809-58-6, Enoxaparin sodium RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (preparation of porous matrixes containing hydrophilic polymers and sugars

enhancement of drug dissoln.)

=> d bib hit 9

- L3 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
- AN 2001:716930 CAPLUS
- DN 136:33811
- TI Synthesis and Screening for Antiacetylcholinesterase Activity of (1-Benzyl-4-oxopiperidin-3-ylidene)methylindoles and -pyrroles Related to Donepezil
- AU Andreani, Aldo; Cavalli, Andrea; Granaiola, Massimiliano; Guardigli, Massimo; Leoni, Alberto; Locatelli, Alessandra; Morigi, Rita; Rambaldi, Mirella; Recanatini, Maurizio; Roda, Aldo
- CS Dipartimento di Scienze Farmaceutiche, Universita di Bologna, Bologna, 40126, Italy
- SO Journal of Medicinal Chemistry (2001), 44(23), 4011-4014 CODEN: JMCMAR; ISSN: 0022-2623
- PB American Chemical Society
- DT Journal
- LA English
- OS CASREACT 136:33811
- RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- AB The design, synthesis, and rapid evaluation of a new class of acetylcholinesterase (AChE) inhibitors related to donepezil are reported. A mol. dynamics simulation of the complex between AChE and one representative compound of the series showed a possible inhibitor binding mode in which favorable interactions are formed between the benzylpiperidinone moiety and some active-site residues. The

biochem. evaluation of this newly synthesized series was performed using a chemiluminescent method suitable for high-throughput screening.

Property 17 9000-81-1, Acetylcholinesterase 120014-06-4, Donepezil RL: BSU (Biological study, unclassified); BIOL (Biological study) (synthesis and screening for antiacetylcholinesterase activity of (1-benzyl-4-oxopiperidin-3-ylidene)methylindoles and -pyrroles related to donepezil)

=> d bib hit 8

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L3 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
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AN 2001:816444 CAPLUS

DN 135:352829

TI Combination therapeutic compositions containing benzene compounds

IN Jaen, Juan C.; Chen, Jin-Long

PA Tularik Inc., USA

SO PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 2

	PATENT NO.					KIND		DATE		APPLICATION NO.						DATE			
PI	WO WO	2001082916 2001082916			A3		2001 2002	1108 0704					20010502						
			CR, HU, LU, SD,	ID, LV, SE,	CZ, IL, MA, SG,	DE, IN, MD,	DK, IS, MG,	AU, DM, JP, MK, SL,	DZ, KE, MN,	EE, KG, MW,	ES, KP, MX,	FI, KR, MZ,	GB, KZ, NO,	GD, LC, NZ,	GE, LK, PL,	GH, LR, PT,	GM, LS, RO,	HR, LT, RU.	
	US	RW:	GH, DE, BJ,	DK, CF,	KE, ES, CG,	FI,	FR, CM,	MZ, GB, GA, 2002	GR, GN,	IE, GW,	IT, ML,	LU, MR,	MC, NE,	NL, SN,	PT, TD,	SE, TG	TR,	BF,	
PRAI	US US US US	US 6653332 US 2004259918 US 2006035928 US 2000-201613P US 2001-847887 US 2003-456932				A1 A1 P		20020328 US 2001-847887 20031125 20041223 US 2003-456932 20060216 US 2005-258817 20000503 20010502 20030605						•					
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The present invention provides pharmaceutical compns. and methods for the AB treatment of diabetes mellitus using combination therapy. The compns. relate to a benzene compound and an antidiabetic agent such as sulfonylureas, biguanides, glitazones, α -glucosidase inhibitors, potassium channel antagonists, aldose reductase inhibitors, glucagon antagonists, activators of RXR, insulin therapy or other anti-obesity agent. The methods include the administration of the combination of benzene compound with antidiabetic agent where the two components are delivered in a simultaneous manner, where the benzene compound is administered first, followed by the antidiabetic agent, as well as wherein the antidiabetic agent is delivered first followed by the benzene compound For example, the benzene compound (I) was synthesized using a 5-amino-2-(3-chloro-5-pyridyloxy)benzonitrile (0.457 g) in methylene chloride to which was added 2,4-dichlorobenzenesulfonyl chloride (0.456 g), followed by pyridine (150 μL). The reaction progress was monitored by TLC, and upon completion the solvent was removed under vacuum. resulting residue was partitioned between methylene chloride and water. The organic layer was drawn off and concentrated The residue was triturated with ether to provide 0.447 g of I as a white solid, m.p.

154-156°. ΙT 50-18-0, Cyclophosphamide 50-78-2, Aspirin 52-53-9, Verapamil 53-03-2, Prednisone 53-86-1, Indomethacin 55-63-0, Nitroglycerin 56-03-1D, Biguanide, derivs. 59-05-2, Methotrexate 59-67-6, Niacin, biological studies 64-77-7, Tolbutamide 64-86-8, Colchicine 86-54-4, Hydralazine 94-20-2, Chlorpropamide 114-07-8, Erythromycin 124-94-7, Triamcinolone 154-93-8, Carmustine 300-62-9, Phenformin 315-30-0, Allopurinol 339-44-6, Glymidine Amphetamine 451-71-8, 518-28-5, Podophyllotoxin 525-66-6, Propranolol Glyhexamide 664-95-9, Tolcyclamide 692-13-7, Buformin 657-24-9, Metformin 968-81-0, Acetohexamide 1156-19-0, Tolazamide 1406-18-4, Vitamin E 3149-00-6, Phenbutamide 4205-90-7, Clonidine 4759-48-2, Isotretinoin 5581-42-0, Glyparamide 5588-38-5, Tolpyrramide 9004-10-8, Insulin, biological studies 10238-21-8, Glyburide 10540-29-1, Tamoxifen 13010-20-3D, Nitrosourea, metal derivs. 13598-36-2D, Phosphonic acid, alkylidenebis- derivs. 15663-27-1, Cisplatin 19216-56-9, Prazocine 21187-98-4, Gliclazide 23214-92-8, Doxorubicin 24455-58-1, Glicetanile 25046-79-1, Glisoxepid 25812-30-0, Gemfibrozil 26944-48-9, Glibornuride 29094-61-9, Glipizide 33069-62-4, Paclitaxel 33342-05-1, Gliquidone 33419-42-0, Etoposide 35273-88-2, Gliflumide 42399-41-7, Diltiazem 45086-03-1, Etoformin 50925-79-6, Colestipol 51876-98-3, Gliamilide 56180-94-0, Acarbose 59865-13-3, Cyclosporine 62571-86-2, Captopril 72432-03-2, Miglitol 74772-77-3, Ciglitazone 80879-63-6, Emiglitate 83480-29-9, Voglibose 79902-63-9, Simvastatin 93479-97-1, Glimepiride 97322-87-7, Troglitazone 103787-97-9, BM 103788-05-2, AD-5075 104343-33-1, MDL-25637 104987-11-3, 106650-56-0, Sibutramine 109229-58-5, Englitazone FK-506 111025-46-8, Pioglitazone 114798-26-4, Losartan 120014-06-4, Donepezil 122320-73-4, Rosiglitazone 127214-23-7, Camiglibose 141200-24-0, Darglitazone 170861-63-9, JTT-501 199914-96-0 371968-35-3D, derivs. RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (benzene compds. in combination therapy for diabetes and diabetes-related disorders) => d bib hit 7 L3 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN 2002:754995 CAPLUS AN DN 137:268473 Porous drug matrices and methods of manufacture thereof TI Straub, Julie; Altreuter, David; Bernstein, Howard; Chickering, Donald E.; IN Khattak, Sarwat; Randall, Greg Acusphere Inc., USA PA U.S. Pat. Appl. Publ., 20 pp., Cont.-in-part of U.S. 6,395,300. SO CODEN: USXXCO DTPatent LА English FAN.CNT 2

PATENT NO. KIND DATE APPLICATION NO. -----PI. US 2002142050 A1 20021003 US 2002-53929 20020122 US 6395300 B1 20020528 US 1999-433486 19991104 EP 1642572 A1 20060405 EP 2005-27194 20000525 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY CN 1823737 20060830 - A CN 2005-10136940 20000525 US 6645528 B1 20031111 US 2000-694407 20001023 US 6932983 B1 20050823 US 2000-706045 20001103

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    US 2000-186310P
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AB Drugs, especially low aqueous solubility drugs, are provided in a porous

preferably microparticles, which enhances dissoln. of the drug in aqueous media. The drug matrixes preferably are made using a process that includes (i) dissolving a drug, preferably a drug having low aqueous solubility, in

a volatile solvent to form a drug solution, (ii) combining at least one pore forming agent with the drug solution to form an emulsion, suspension, or second solution and hydrophilic or hydrophobic excipients that stabilize the drug and inhibit crystallization, and (iii) removing the volatile solvent and

forming agent from the emulsion, suspension, or second solution to yield the porous matrix of drug. Hydrophobic or hydrophilic excipients may be selected to stabilize the drug in crystalline form by inhibiting crystal growth or to stabilize the drug in amorphous form by preventing crystallization The pore forming agent can be either a volatile liquid that is immiscible with the drug solvent or a volatile solid compound, preferably a volatile salt. In a preferred embodiment, spray drying is used to remove the solvents and the pore forming agent. The resulting porous matrix has a faster rate of dissoln. following administration to a patient, as compared to non-porous matrix forms of the drug. In a preferred embodiment, microparticles of the porous drug matrix are reconstituted with an aqueous medium and administered parenterally, or processed using standard techniques into tablets or capsules for oral administration. Thus, 5.46 g of PEG 8000, 0.545 g of prednisone, and 0.055 g of Span 40 were dissolved in 182mL of methylene chloride. A solution of 3.27 g of ammonium bicarbonate in 18.2 mL of water was added to the organic solution (phase ratio 1:10) and homogenized for 5 min at 16,000 RPM. The resulting emulsion was spray dried on a benchtop spray dryer using an air-atomizing nozzle and nitrogen as the drying gas.

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IT 50-28-2, Estradiol, biological studies 50-35-1, Thalidomide Verapamil 53-03-2, Prednisone 55-98-1, Busulfan 57-63-6, Ethinyl estradiol 58-61-7, Adenosine, biological studies 59-92-7, Levodopa, biological studies 67-78-7 67-97-0, Vitamin D3 71-58-9, Medroxyprogesterone acetate 75-64-9, Erbumine, biological studies 77-36-1, Chlorthalidone 89-57-6, Mesalamine 126-07-8, Griseofulvin 298-46-4, Carbamazepine 302-79-4, Tretinoin 128-13-2, Ursodiol 321-64-2, Tacrine 363-24-6, Dinoprostone 437-38-7, Fentanyl 439-14-5 , Diazepam 443-48-1, Metronidazole 518-28-5, Podofilox 631-61-8, Ammonium acetate 657-24-9, Metformin 745-65-3, Alprostadil 1066-33-7, Ammonium bicarbonate Lorazepam 1863-63-4, Ammonium benzoate 1951-25-3, Amiodarone 3239-44-9, Dexfenfluramine 4759-48-2, Isotretinoin 5534-09-8, Beclomethasone dipropionate 5593-20-4, Betamethasone dipropionate 9002-68-0, Follitropin 9002-72-6, Growth Tween 80 9007-12-9, Calcitonin 9041-93-4, 10238-21-8, Glyburide 11096-26-7, Erythropoietin 9005-65-6, Tween 80 Bleomycin sulfate 12125-02-9, Ammonium chloride, biological studies 12629-01-5, Somatropin 13311-84-7, Flutamide 15307-79-6, Diclofenac 12633-72-6, Amphotericin sodium 15307-86-5, Diclofenac 15687-27-1, Ibuprofen 18559-94-9, . Albuterol 20830-75-5, Digoxin 21256-18-8, Oxaprozin 21829-25-4, Nifedipine 22204-53-1, Naproxen 25322-68-3, Polyethylene glycol 26266-57-9, Span 40 27203-92-5, Tramadol 28860-95-9, Carbidopa

28981-97-7, Alprazolam. 29094-61-9, Glipizide 30516-87-1, Zidovudine 32986-56-4, Tobramycin 33069-62-4, Paclitaxel 34911-55-2, Bupropion 36505-84-7, Buspirone 40391-99-9 41340-25-4, Etodolac 41575-94-4, Carboplatin 42399-41-7, Diltiazem 42924-53-8, Nabumetone 51333-22-3; Budesonide 51773-92-3, Mefloquine hydrochloride 54143-55-4, Flecainide 54527-84-3, Nicardipine hydrochloride 54910-89-3, Fluoxetine 54965-21-8, Albendazole 54965-24-1, Tamoxifen citrate 55268-75-2, 56124-62-0, Valrubicin 56180-94-0, Acarbose 60142-96-3, Gabapentin 60205-81-4, Ipratropium. 63659-18-7, Betaxolol 66085-59-4, Nimodipine 65277-42-1, Ketoconazole 66376-36-1, 66852-54-8, Halobetasol propionate 68693-11-8, Manosine 70476-82-3, Mitoxantrone hydrochloride Alendronate 68693-11-8, Modafinil 69655-05-6, Didanosine 72432-03-2, Miglitol 72509-76-3, Felodipine 72558-82-8, Ceftazidime 72956-09-3, Carvedilol 75330-75-5, Lovastatin 73384-59-5, Ceftriaxone 73590-58-6, Omeprazole 75695-93-1, Isradipine 75847-73-3, Enalapril 76095-16-4, Enalapril maleate 76547-98-3, Lisinopril 76824-35-6. Famotidine 76963-41-2, Nizatidine 78246-49-8, Paroxetine hydrochloride 77883-43-3, Doxazosin mesylate 78628-80-5, Terbinafine 78755-81-4, Flumazenil 79517-01-4, Octreotide acetate hydrochloride 79559-97-0, Sertraline hydrochloride 79794-75-5, Loratadine 79902-63-9, Simvastatin 80274-67-5, Metoprolol fumarate 81098-60-4, Cisapride 81103-11-9, Clarithromycin 82410-32-0, Ganciclovir 82752-99-6, Nefazodone hydrochloride 82834-16-0, Perindopril 83799-24-0, Fexofenadine 83905-01-5, Azithromycin 83919-23-7, Mometasone furoate 84625-61-6, Itraconazole 86386-73-4, Fluconazole 86541-74-4, Benazepril hydrochloride 86541-75-5, Benazepril 87679-37-6, Trandolapril 89778-27-8, Toremifene citrate 90566-53-3, 91161-71-6, Terbinafine 91421-42-0, Rubitecan Fluticasone 93413-69-5, Venlafaxine 93957-54-1, Fluvastatin 95058-81-4, Gemcitabine 95233-18-4; Atovaquone 97048-13-0, Urofollitropin 97322-87-7, Troglitazone 98048-97-6, Fosinopril 98079-52-8, Lomefloxacin hydrochloride 98319-26-7, Finasteride 99011-02-6, Imiquimod 99294-93-6, Zolpidem tartrate 100286-90-6, Irinotecan hydrochloride 100986-85-4, Levofloxacin 103577-45-3, Lansoprazole 103628-48-4, Sumatriptan succinate 103775-10-6, Moexipril Famciclovir 104632-25-9, Pramipexole dihydrochloride 106266-06-2, Risperidone 106392-12-5, Pluronic f127 106463-17-6, Tamsulosin 106685-40-9, Adapalene 107753-78-6, Zafirlukast hydrochloride 109889-09-0, Granisetron 110871-86-8, Sparfloxacin 111470-99-6, Amlodipine besylate 111974-72-2, Quetiapine fumarate 112809-51-5, Letrozole 113806-05-6, Olopatadine 114798-26-4, Losartan 114977-28-5, Docetaxel 115956-12-2, Dolasetron 120014-06-4, Donepezil 124832-26-4, Valacyclovir 127779-20-8, Saquinavir 131918-61-1, Paricalcitol 132539-06-1, Olanzapine 134308-13-7, 134678-17-4, Lamivudine 137862-53-4, Valsartan Tolcapone 140678-14-4, Mangafodipir trisodium 142373-60-2, Tirofiban hydrochloride 145040-37-5, Candesartan cilexetil 144701-48-4, Telmisartan 147059-72-1, Trovafloxacin 147245-92-9, Glatiramer acetate 150378-17-9, Indinavir 154248-97-2, Imiglucerase 154598-52-4, Efavirenz 155141-29-0, Rosiglitazone maleate 155213-67-5, Ritonavir 158966-92-8, Montelukast 159989-65-8, Nelfinavir mesylate 161814-49-9. 162011-90-7, Rofecoxib Amprenavir 169590-42-5, Celecoxib 171599-83-0, Sildenafil citrate 260779-88-2, Cisapride monohydrate 679809-58-6, Enoxaparin sodium RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (porous drug matrixes and methods of manufacture thereof)

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DN
     141:420397
TI
     Albumin binding sites for evaluating drug interactions, and methods for
     evaluating or designing drugs based on their albumin binding properties
IN
     Carter, Daniel C.; Ho, Joseph; Wang, Zhongmin
PA
     New Century Pharmaceuticals, USA
SO
     PCT Int. Appl., 73 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
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                                                                     DATE
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PRAI US 2003-468.057P
                          P
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     A method is provided for evaluating drug compds. based on their binding
     properties to human serum albumin, wherein structural information at
     particular albumin binding regions is entered into a computer database and
     assessed with regard to particular contacting binding residues
     located in accordance with the invention. The information obtained
     through the computer database is thus useful in assessing and predicting
     drug interactions at albumin binding sites. Further, protein fragments
     including one or more albumin binding sites are provided which can be used
     in methods of assessing and designing drugs.
IT
     50-28-2, Beta-Estradiol, biological studies
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=> d bib hit 5
     ANSWER 5 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
     2005:638706 CAPLUS
     143:159548
     Donepezil formulations
     Boehm, Garth; Dundon, Josephine
     Alpharma, Inc., USA
     PCT Int. Appl., 99 pp.
     CODEN: PIXXD2
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                                               IN 2006-DN4397
                                                                         20060728
PRAI US 2003-533496P
                          · Р
                                   20031231
     WO 2004-US42999
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                                  20041223
     Donepezil formulations, including amorphous donepezil or
     pharmaceutically acceptable salts thereof; sustained-release formulations;
     and donepezil sprinkle formulations are disclosed.
     120014-06-4, Donepezil
     RL: PEP (Physical, engineering or chemical process); PYP (Physical
     process); THU (Therapeutic use); BIOL (Biological study); PROC (Process);
     USES (Uses)
         (formulations)
=> d bib hit 1-4
     ANSWER 1 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
     2007:385013 CAPLUS
     146:387123
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144701-48-4, Telmisartan

145040-37-5,

796061-49-9, NCP 007

120014-06-4, Donepezil

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Candesartan Cilexetil 169590-42-5, Celecoxib

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TI Microparticles with modified release of at least one active principle and oral galenic form comprising same
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PA Flamel Technologies, Fr.

SO PCT Int. Appl., 50pp. CODEN: PIXXD2

DT Patent

LA French

FAN.CNT 1

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PATENT NO.
                            KIND
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               GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,
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              MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS,
               RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ,
               UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
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               KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
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The invention concerns microparticle systems with modified release of oral active principle(s). The invention aims at providing a novel multimicroparticle galenic system operating in accordance with a dual time-dependent and pH-dependent release mechanism, which enables the following three parameters to be adjusted independently of one another: (a) the latent period preceding the release of the active principle in the stomach; (b) the pH triggering the release of the active principle in the intestine; (c) the release speed of the active principle. This is achieved through the use of coated microparticles made from particles of active principle each coated with two coating films A and B. Film A comprises: film-forming (co)polymer (A1) insol. in fluids of the gastrointestinal tract, Et cellulose (co)polymer (A2) soluble in fluids of the gastrointestinal tract, plasticizing polyvinylpyrrolidone (A3), and castor oil and optionally a surfactant and/or magnesium stearate lubricant (A4). Film B comprises a hydrophilic polymer (B1) bearing ionized groups with neutral pH (Eudragit L100-55) and a hydrophobic compound (B2) (Lubritab). Metformin hydrochloride and povidone were dissolved in water and spray-dried over neural microspheres. The microspheres were then coated to obtain prolonged-release metformin microparticles.

88107-10-2, Tomelukast IT88150-42-9, Amlodipine 88851-62-1, Piriprost 88931-51-5, Clinprost potassium 89365-50-4, Salmeterol 89565-68-4, Tropisetron 89667-40-3, Isbogrel 89778-26-7, Toremifene 90357-06-5, 90566-53-3, Fluticasone= 91161-71-6, Terbinafine Bicalutamide 91374-21-9 91832-40-5, Cefdinir 92623-85-3, Milnacipran= 92665-29-7, Cefprozil 93390-81-9, Fosphenytoin 93413-69-5, Venlafaxine= 93479-97-1, Glimepiride 93792-59-7, Hydroxypropyl methyl cellulose succinate 93957-54-1, Fluvastatin 94535-50-9, Levcromakalim 95058-81-4, Gemcitabine 95190-13-9, Tetrazolastmeglumine 95233-18-4, 95260-33-6, HYDROXYNORPETHIDINE Atovaquone 95634-82-5, Batelapine 96036-03-2, Meropenem 96566-25-5, Ablukast 96829-58-2, Orlistat 97048-13-0, Urofollitropin 97240-79-4, Topiramate 97322-87-7, Troglitazone 97466-90-5, Quinelorane 97519-39-6, Ceftibutene 97682-44-5, Irinotecan 97852-72-7, Tibenelast 97901-21-8, Nafagrel

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Brasofensine 171752-56-0, Adrogolide 173146-27-5, Denileukin diftitox
174722-31-7, Rituximab 179120-92-4, Altinicline 180288-69-1,
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183325-78-2, Calfactant 188039-54-5, Palivizumab 188627-80-7, Eptifibatide 196618-13-0, Oseltamivir 218620-50-9, Pegvisomant 465499-11-0, Rapacuronium= 612534-95-9, Azithromycine RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (microparticles with modified release of at least one active principle and oral galenic form comprising same) ANSWER 2 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN 2007:118095 CAPLUS 146:190546 Gelled donepezil compositions containing oils and gelling agents for improved stability Shudo, Jutaro; Yoneto, Kunio U.S. Pat. Appl. Publ., 9pp. CODEN: USXXCO Patent English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE -----____ _____ -----US 2007026075 A1 20070201 US 2006-476410 20060627 WO 2007018801 WO 2006-US25112 A1 20070215 20060627 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM PRAI US 2005-704104P Р 20050728 Amorphophallus rivieri Central nervous system agents Gelation agents Stability Surfactants (gelled donepezil compns. containing oils and gelling agents for improved stability) 50-70-4, D-Sorbitol, biological studies 94-13-3, Propyl p-hydroxybenzoate 110-27-0, Isopropyl myristate 128-44-9, Sodium 151-21-3, Sodium lauryl sulfate, biological studies Saccharine 621-71-6, Tricaprin 2624-31-9, Potassium palmitate 3234-81-9, Octadecyl myristate 4706-78-9, Potassium lauryl sulfate 8063-16-9, Psyllium seed gum 9000-01-5, Acacia gum 9000-07-1, Carrageenan 9000-28-6, Ghatti gum 9000-30-0, Guar gum 9000-36-6, Karaya gum 9000-40-2, Locust bean gum 9000-65-1, Tragacanth gum 9000-69-5, Pectin 9002-18-0, Agar 9002-89-5, Polyvinyl alcohol 9003-01-4, Polyacrylic 9003-04-7, Sodium polyacrylate 9003-11-6, Polyoxyethylene polyoxy acid propylene glycol 9003-39-8, Polyvinyl pyrrolidone 9004-32-4, Carmellose sodium 9004-34-6, Cellulose, biological studies 9004-34-6D, Cellulose, derivs. 9004-53-9, Dextrin 9004-54-0, Dextran, biological studies 9004-64-2, Hydroxypropyl cellulose 9004-67-5, Methyl cellulose

9005-27-0, Hydroxyethyl starch 9005-32-7, Alginic acid 9005-38-3. Sodium alginate 9012-76-4, Chitosan 9032-42-2, Hydroxyethyl methyl cellulose 9036-66-2, Arabinogalactan 9036-88-8, Mannan 9049-76-7, Hydroxypropyl starch 9057-02-7, Pullulan 9057-06-1, Carboxymethyl

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9062-07-1, 1-Carrageenan 11078-31-2, D-Gluco-D-mannan starch 11138-66-2, Xanthan gum 25086-89-9 25322-68-3, Macrogol 37220-17-0, 39300-88-4, Tara gum 51434-18-5, Cassia gum Konjak mannan 64366-24-1, Potassium-carrageenan 68797-35-3, Dipotassium 71010-52-1, Gellan gum 120011-70-3, Donepezil glycyrrhizinate hydrochloride 120014-06-4, Donepezil RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (gelled donepezil compns. containing oils and gelling agents for improved stability) ANSWER 3 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN ·2006:299138 CAPLUS 144:338152 Use of purified donepezil maleate for preparing pharmaceutically pure amorphous donepezil hydrochloride Arad, Oded; Zelikovitch, Lior; Alnabari, Mohammed; Brand, Michael; Gribun, Irina; Salman, Ada; Shiffer, Meital; Shookrun, Moty; Kurlat, Orna; Bentolila, Moshe; Kaspi, Joseph U.S. Pat. Appl. Publ., 6 pp. CODEN: USXXCO Patent English FAN.CNT 1 APPLICATION NO. DATE PATENT NO. KIND DATE US 2005-235106 20050927 A1 20060330 US 2006069125 AU 2005-288521 20050927 AU 2005288521 A1 20060406 CA 2005-2581926 20050927 20060406 CA 2581926 Α1 WO 2005-IL1034 20050927 20060406 WO 2006035433 A2 A3 · WO 2006035433 20060727 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM 20040929 PRAI US 2004-613707P Ρ W 20050927 WO 2005-IL1034 Use of purified donepezil maleate for preparing pharmaceutically pure amorphous donepezil hydrochloride The present invention provides a crystalline donepezil maleate, which is used as an intermediate in the preparation of donepezil hydrochloride. Also provided are novel processes for producing same in substantially pure form and a process for producing pharmaceutically pure amorphous donepezil hydrochloride therefrom. Solvents (organic; purified donepezil maleate for preparing pharmaceutically pure amorphous donepezil hydrochloride) Crystallization . Freeze drying (purified donepezil maleate for preparing pharmaceutically pure amorphous donepezil hydrochloride) Disaccharides

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

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Monosaccharides

(purified donepezil maleate for preparing pharmaceutically pure amorphous donepezil hydrochloride) Drying (spray; purified donepezil maleate for preparing pharmaceutically pure amorphous donepezil hydrochloride) 60-29-7, Diethyl ether, uses 64-17-5, Ethanol, uses 67-56-1, Methanol, uses 67-63-0, Isopropanol, uses 67-64-1, Acetone, uses Chloroform, uses 71-23-8, Propanol, uses 71-36-3, Butanol, uses 75-05-8, Acetonitrile, uses 75-09-2, Dichloromethane, uses sec-Butanol 78-93-3, Methylethyl ketone, uses 108-20-3, Diisopropyl 108-21-4, Isopropyl acetate 108-88-3, Toluene, uses 110-19-0, Isobutyl acetate 110-54-3, Hexane, uses 141-78-6, Ethyl acetate, uses 1330-20-7, Xylene, uses 1634-04-4, Methyl tert-butyl ether RL: NUU (Other use, unclassified); USES (Uses) (purified donepezil maleate for preparing pharmaceutically pure amorphous donepezil hydrochloride) 110-16-7, Maleic acid, reactions 497-19-8, Sodium carbonate, reactions 584-08-7, Potassium carbonate 1310-58-3, Potassium hydroxide, reactions 1310-73-2, Sodium hydroxide, reactions 7647-01-0, Hydrochloric acid, reactions RL: RCT (Reactant); RACT (Reactant or reagent) (purified donepezil maleate for preparing pharmaceutically pure amorphous donepezil hydrochloride) 880490-66-4P RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (purified donepezil maleate for preparing pharmaceutically pure amorphous donepezil hydrochloride) 120014-06-4, Donepezil RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses) (purified donepezil maleate for 'preparing pharmaceutically pure amorphous donepezil hydrochloride) 120011-70-3P, Donepezil hydrochloride RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (purified donepezil maleate for preparing pharmaceutically pure amorphous donepezil hydrochloride) 63-42-3, Lactose 69-65-8, Mannitol 9004-34-6D, Cellulose, derivs. 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 9005-25-8, Starch, biological 9050-36-6, Maltodextrin 64044-51-5 studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (purified donepezil maleate for preparing pharmaceutically pure amorphous donepezil hydrochloride) ANSWER 4 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN 2005:1292008 CAPLUS Preparation of polymorphs of donepezil hydrochloride Aher, Umesh P.; Tarur, Venkatasubramanian R.; Sathe, Dhananjay Govind; Naidu, Avinash Venkataraman; Sawant, Kamlesh Digambar U.S. Pat. Appl. Publ., 7 pp., Cont.-in-part of U.S. Ser. No. 72,169. CODEN: USXXCO Patent English FAN.CNT 5 PATENT NO. KIND · DATE APPLICATION NO. DATE ---------_____ _____

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     US 2007123565
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RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- AB The present invention discloses a novel, stable polymorph of 1-benzyl-4[(5,6-dimethoxy-1-indanone)-2-yl]methylpiperidine-HCl (donepezil-HCl) (I). Further the present invention discloses a process for producing amorphous I and its polymorphic Form VI. Thus, I was prepared by the reaction of the free base with oxalic acid followed by treatment with HCl.
- IT 120014-06-4, Donepezil

RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(preparation of polymorphs of donepezil hydrochloride)